

In the Claims

1. (Currently Amended) A method for activating a card in a network element comprising one or more switch cards, the method comprising:

automatically holding a processor on the card and placing the card in a reset mode in response to powering up of the card;

in response to placing the card in reset mode:

communicating a signal indicating a type of the card;

retrieving an executable file stored remotely from the card and switch cards based at least in part on the type of the card; and

downloading the executable file to a memory for a processor on the card without requiring the use of boot code on the card; and

removing the card from the reset state and operating the card using the executable file without the use of boot code.

2. (Original) The method of Claim 1, the memory comprising a volatile memory.

3. (Original) The method of Claim 1, downloading the executable file to a memory for a processor on the card without using boot code on the card comprising holding the processor while downloading the executable file and releasing the processor subsequent to downloading the executable file.

4. (Original) The method of Claim 3, holding the processor comprising holding the processor with a state machine and releasing the processor comprising releasing the processor with the state machine.

5. (Original) The method of Claim 4, the state machine comprising a field-programmable gate array.

6. (Original) The method of Claim 4, the state machine comprising an application-specific integrated circuit.

7. (Original) The method of Claim 4, the state machine comprising discrete logic.

8. (Original) The method of Claim 1, further comprising providing a dedicated download card operable to retrieve the executable file and download the executable file.

9. (Original) The method of Claim 8, further comprising transmitting a present message for the card to the download card.

10. (Original) The method of Claim 8, further comprising transmitting a reset message for the card to the download card.

11. (Currently Amended) A system for activating a card in a network element comprising one or more switch cards, the system comprising:

a line card comprising a processor and an associated memory and operable to hold the processor and place itself in a reset mode automatically upon powering up of the card;

a common card operable to communicate with a plurality of line cards and operable, while the line card is in a reset mode, to communicate a signal indicating a type for the line card, to retrieve an executable file for the line card based at least in part on the type of the line card, the executable file stored remotely from the line card and the common card, and to download the executable file to the memory on the line card without requiring the use of boot code on the line card; and

the processor operable to operate the line card using the executable file without the use of boot code on the line card.

12. (Original) The system of Claim 11, the memory comprising a volatile memory.

13. (Original) The system of Claim 11, further comprising a state machine operable to hold the processor while downloading the executable file and to release the processor subsequent to downloading the executable file.

14. (Original) The system of Claim 13, the state machine comprising a field-programmable gate array.

15. (Original) The system of Claim 13, the state machine comprising an application-specific integrated circuit.

16. (Original) The system of Claim 13, the state machine comprising discrete logic.

17. (Original) The system of Claim 11, the common card comprising a dedicated download card.

18. (Original) The system of Claim 11, the common card comprising a switch card.

19. (Original) The system of Claim 11, further comprising a server remote from the common card, the server comprising a memory operable to store the executable file.

20. (Currently Amended) A line card for a network element comprising one or more line cards, the line card comprising:

a processor;

a memory associated with the processor;

an activation system operable to place the line card in a reset mode automatically upon powering up of the card and, while in the reset mode, operable to identify the line card to the network element, to hold the processor while the network element downloads an executable file for the line card to the memory without requiring the use of boot code on the line card, and to release the processor subsequent to the downloading of the executable file; and

the processor operable to operate the line card using the executable file without the use of boot code on the line card.

21. (Original) The line card of Claim 20, the memory comprising a volatile memory.

22. (Original) The line card of Claim 20, the activation system comprising a state machine.

23. (Original) The line card of Claim 22, the state machine comprising a field-programmable gate array.

24. (Original) The line card of Claim 22, the state machine comprising an application-specific integrated circuit.

25. (Original) The line card of Claim 22, the state machine comprising discrete logic.

26. (Currently Amended) A system for activating a card in a network element comprising one or more switch cards, the system comprising:

logic stored on at least one computer-processable medium;

the logic operable to place the card in a reset mode automatically upon powering up of the card and, while in the reset mode, operable to communicate a signal indicating a type for the card, to retrieve an executable file for the card based at least in part on the type of the card, the executable file stored remotely from the card and the switch cards, ~~and to download~~ to download the executable file to the memory on the card without requiring the use of boot code on the card; and to operate the line card using the executable file without the use of boot code on the card.

27. (Original) The system of Claim 26, the memory comprising a volatile memory.

28. (Original) The system of Claim 26, the logic comprising software instructions.

29. (Currently Amended) A method for card activation in a network element, comprising:

transitioning into a power up status at a card comprising a processor and a memory accessible to the processor;

in response to the transition, communicating a signal at least partially identifying the card;

receiving an executable file at the card in response to communicating the signal;

while preventing the processor from accessing the memory, storing the executable file in the memory; and

operating the line card using the executable file without the use of boot code on the card by executing the executable file using the processor.

30. (Previously Presented) The method of Claim 29, wherein preventing the processor from accessing the memory comprises suspending the processor.

31. (Previously Presented) The method of Claim 29, wherein preventing the processor from accessing the memory comprises shutting down the processor.